

REMARKS

Entry of this amendment is respectfully requested.

It is believed that all objections and 35 U.S.C. §112, second paragraph, rejections have been overcome by the amendments to the claims.

Claims 16-22 were rejected under 35 U.S.C. §102(b) over Faber ('639) as evidenced by the Sigma-Aldrich publication and the GE publication. This rejection has been rendered moot by the amendment to claims 16, which now incorporates the subject matter of claim 24 which was not rejected under this statute.

Claims 21-24 were rejected under 35 U.S.C. §103(a) over Faber as evidenced by the Sigma-Aldrich publication and the GE publication. Claims 29 and 39 were rejected under 35 U.S.C. §103(a) over the foregoing combination of references further in view of Pengilly. Claims 31-40 were rejected under 35 U.S.C. §103(a) over Faber, Sigma-Aldrich, GE and Martens. Applicants respectfully traverse.

Faber describes the underlying problem as follows:

However, in most cases the amount of color contrast which is achieved by known methods is not as high as desired. Accordingly, there is a constant need for additives which can cause significant color changes to occur in the polymeric materials in which it is incorporated. Moreover, it is highly desirable that these additives not deleteriously affect the beneficial physical properties of the polymers. (Faber, col. 1, lines 53 to 59).

Faber further discloses the usage of copper phosphates only in addition to carbon black, wherein the copper phosphate had a particle size (PS) within the range of 6 μm to 30 μm (see Faber, col. 7, B. Copper Phosphate).

In contrast, an object of the presently claimed invention lies in a:

"...thermoplastic polymeric materials which can be heated by exposure to NIR and/or IR light in a straightforward and economical way so that further processing is possible in order to shape them". (spec., page 2, lines 13 to 16).

A further problem addressed by the presently claimed invention is:

“...that the transparency in the visible wavelength range of from 400 to 700 nm is not significantly impaired and the absorption in the wavelength range of from 700 to 1500 nm is significantly higher than in the visible range; for example, the absorption by such a polymer at a wavelength of 1100 nm is at least twice as great as the adsorption at 600 nm.” (spec. page 2, lines 29 to page 3, line 5).

Martens shows no more than the infrared absorption properties of various natural copper phosphate minerals.

Thus, this rejection must be withdrawn.

Claims 25-28 were rejected under 35 U.S.C. §103(a) over the combination of DE '803 in view of Faber and as evidenced by the Sigma-Aldrich publication and the GE publication. Applicants respectfully submit that these references do not teach or suggest that the inorganic metal phosphate has Scherrer crystallite sizes of from 0.001 to 2 μm for reasons noted above.

Furthermore, DE '803 merely describes a new method for the preparation of copper (II)-hydroxide phosphates. Nevertheless, knowledge of the cited references do not render the presently claimed invention obvious because there is no indication for the skilled man that the above-mentioned problems could be solved as indicated by the presently claimed invention.

Thus, this rejection must be withdrawn.

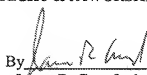
In sum, even assuming *arguendo* that the claimed inorganic metal phosphates are known and that polymers containing the claimed inorganic metal phosphates are known, none of the cited references disclose the NIR or IR absorption behavior of a thermoplastic containing the claimed phosphates. Thus, the present claims are believed to be allowable.

In view of the foregoing, allowance is respectfully requested.

The Commissioner is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 50-0624, under Order No. DNAG-322.

Respectfully submitted

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